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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,831	10/19/2004	Hiroshi Saitoh	MTS-3542US	6421
23122	7590	10/05/2007	EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,831	SAITO ET AL.	
	Examiner	Art Unit	
	Nigar Chowdhury	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 October 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 and 8-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 and 8-23 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 October 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 5/9/2005, 10/19/2004.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 9-10, 21-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 9-10, 21-22 defines a **program** embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized"-Guidelines Annex IV). That is, the scope of the presently claimed **program** can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

The examiner suggests amending the claim to embody the storage medium on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,592,301 by Shimada.
2. Regarding **claim 1**, an AutoREC signal multiplex apparatus comprising: (fig. 3)
 - video signal generation means of generating a video signal by recording a video (fig. 1-3, col.2 lines 25-35),
 - indication means of indicating a start of recording and/or a stop of recording (fig. 3, col. 2 lines 65-col. 3 lines 33),
 - AutoREC signal generation means of generating an AutoREC signal, which has recording marks to be multiplexed with frames where recording is continued, in conjunction with the start of recording and/or the stop of recording based on indication (fig. 2-3, col. 3 lines 37-col. 4 lines 34);
 - AutoREC signal multiplex means of multiplexing generated AutoREC signal with generated video signal (fig. 2-3, col. 3 lines 37-col. 4 lines 34).

3. Regarding **claim 2**, the AutoREC signal multiplex apparatus wherein AutoREC signal multiplex means multiplexes generated AutoREC signal with generated video signal at the timing of indication (fig. 2-3, col. 3 lines 37-col. 4 lines 34).
4. Regarding **claim 3**, the AutoREC signal multiplex apparatus wherein AutoREC signal is multiplexed with a LTC (Longitudinal Time Code) user's bit (fig. 3) or a VITC (Vertical Interval Time Code) user's bit of a frame of video signal.
5. Regarding **claim 4**, the AutoREC signal multiplex apparatus wherein AutoREC signal has a start mark to be multiplexed with a frame where recording is started, and a stop mark to be multiplexed with a frame where recording is stopped (fig. 2-3, col. 3 lines 37-col. 4 lines 34).
6. Regarding **claim 5**, the AutoREC signal multiplex apparatus wherein AutoREC signal multiplex means multiplexes start marks with a predetermined number of frames after the frame where recording is started (fig. 2-3, col. 3 lines 37-col. 4 lines 34, signal multiplexed start marks with a zero number of frames after the frame where recording is started).
7. Regarding **claim 6**, the AutoREC signal multiplex apparatus wherein AutoREC signal multiplex means multiplexes stop marks with a predetermined number of frames before the frame where recording is stopped (fig. 2-3, col. 3 lines 37-col. 4 lines 34,

signal multiplexed stop marks with a zero number of frames before the frame where recording is stopped).

8. **Claim 8** is rejected for the same reason as discussed as corresponding claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 9-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,592,301 by Shimada in view of US Patent No. 7,260,306 by Murata et al.

10. Regarding **claim 9**, Shimada discloses an apparatus comprising:

- the video signal generation step of generating a video signal by recording a video (fig. 1-3, col.2 lines 25-35), the AutoREC signal generation step of generating an AutoREC signal, which has recording marks to be multiplexed with frames where recording is continued, in conjunction with the start of recording and/or the stop of recording based on indication, and the AutoREC signal multiplex step of multiplexing generated AutoREC signal with generated video signal (fig. 2-3, col. 3 lines 37-col. 4 lines 34)

Shimada fails to disclose a computer to execute an apparatus. Murata discloses a computer to execute an apparatus (fig. 2 (4))

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Shimada's system to include a computer, as taught by Murata, to control/process a device for the advantage of providing more control on the device.

11. **Claim 10** is rejected for the same reason as discussed as corresponding claim 9 above.

12. Regarding **claim 11**, Shimada discloses a video signal division apparatus comprising:

- AutoREC signal detection means of detecting an AutoREC signal which is (1) generated, based on indication of a start of a recording of a video and/or a stop of recording, in conjunction with the start of recording and/or the stop of recording (fig. 2-3, col. 3 lines 37-col. 4 lines 34), (2) multiplexed with a video signal generated by performing recording (fig. 2-3, col. 3 lines 37-col. 4 lines 34),

Shimada fails to disclose video signal division means of dividing video signal based on a result of detection.

Murata discloses video signal division means of dividing video signal based on a result of detection (fig. 10, col. 2 lines 22-col. 3 lines 59).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Shimada's system to include a detector, as taught by Murata, to detect divider, in point or out point of a program for a viewer. Viewer can easily find out which portion of video they want to watch through detector.

13. Regarding **claim 12**, Shimada discloses the video signal division apparatus wherein AutoREC signal has a start mark to be multiplexed with a frame where recording is started, and a stop mark to be multiplexed with a frame where recording is stopped (fig. 2-3, col. 3 lines 37-col. 4 lines 34).

14. Regarding **claim 13**, Murata discloses the video signal division apparatus wherein video signal division means once divides generated video signal when AutoREC signal detection means continuously detects start marks without detecting stop marks (fig. 10, col. 2 lines 22-col. 3 lines 59).

15. Regarding **claim 14**, the video signal division apparatus wherein AutoREC signal (Shimada, fig. 3) has recording marks to be multiplexed with frames where recording is continued (Murata, fig. 1, 2, col. 6 lines 39-col. 8 lines 37).

16. Regarding **claim 15**, Murata discloses the video signal division apparatus wherein video signal division means once divides generated video signal when

(AutoREC, Shimada, fig. 3) signal detection means stops detecting recording marks (fig. 10, col. 2 lines 22-col. 3 lines 59).

17. Regarding **claim 16**, Shimada discloses the video signal division apparatus wherein recording mark has a value which changes for every frame (fig. 2-3, col. 3 lines 37-col. 4 lines 34).

18. Regarding **claim 17**, Murata discloses the video signal division apparatus wherein video signal division means once divides generated video signal when AutoREC signal detection means continuously detects recording marks having the same value (fig. 10, col. 2 lines 22-col. 3 lines 59).

19. Regarding **claim 18**, Murata discloses the video signal division apparatus wherein generated AutoREC signal is multiplexed again with divided video signal (fig. 1, 2, col. 6 lines 39-col. 8 lines 37, fig. 10, col. 2 lines 22-col. 3 lines 59).

20. Regarding **claim 19**, Murata discloses the video signal division apparatus wherein a predetermined pre-roll video signal is inserted just before divided video signal (fig. 10, col. 2 lines 22-col. 3 lines 59).

21. **Claim 20** is rejected for the same reason as discussed as corresponding claim 11 above.

22. **Claim 21** is rejected for the same reason as discussed as corresponding claims 9 and 11 above.
23. **Claim 22** is rejected for the same reason as discussed as corresponding claim 10 above.
24. **Claim 23** is rejected for the same reason as discussed as corresponding claim 11 above.

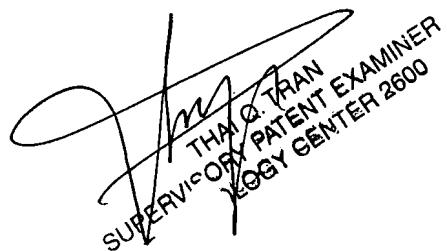
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nigar Chowdhury whose telephone number is 571-272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
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